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DATE: Wednesday, June 15, 2005

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| <input type="checkbox"/> | L8              | L6 and plant                                 | 97               |
| <input type="checkbox"/> | L7              | L4 and plant                                 | 8                |
| <input type="checkbox"/> | L6              | hypomethyl\$ and transgen\$                  | 130              |
| <input type="checkbox"/> | L5              | hypotmethyl\$ and transgen\$                 | 0                |
| <input type="checkbox"/> | L4              | paramut\$                                    | 28               |
| <input type="checkbox"/> | L3              | pta3956 or pta4030 or pta3965 or pta3828     | 0                |
| <input type="checkbox"/> | L2              | pta-3956 or pta-4030 or pta-3965 or pta-3828 | 1                |
| <input type="checkbox"/> | L1              | mop2-1 or rmr1-1 or rmr2-1 or mop1-1         | 1                |

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| NEWS         | 16 | APR 28 | Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS   |
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| NEWS         | 20 | JUN 06 | The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available   |
| NEWS         | 21 | JUN 13 | RUSSIAPAT: New full-text patent database on STN  |
| NEWS         | 22 | JUN 13 | FRFULL enhanced with patent drawing images   |
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 14:18:06 ON 15 JUN 2005

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

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LAST RELOADED: Jun 10, 2005 (20050610/UP).

=> file agricola caplus biosis

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.06

0.27

FILE 'AGRICOLA' ENTERED AT 14:18:19 ON 15 JUN 2005

FILE 'CAPLUS' ENTERED AT 14:18:19 ON 15 JUN 2005

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FILE 'BIOSIS' ENTERED AT 14:18:19 ON 15 JUN 2005

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=> s mop1-1 or mop2-1 or rmr1-1 or rmr2-1

L1 4 MOP1-1 OR MOP2-1 OR RMR1-1 OR RMR2-1

=> dup rem l2

L2 IS NOT VALID HERE

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> dup rem l1

PROCESSING COMPLETED FOR L1

L2 3 DUP REM L1 (1 DUPLICATE REMOVED)

=> d 1-3 ti

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

TI Mediator of paramutation1 is required for establishment and maintenance of paramutation at multiple maize loci

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

TI Comparison between phenomenological and microscopic optical potential in nuclear data evaluations

=> d pi

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

|                  |    |          |                 |          |
|------------------|----|----------|-----------------|----------|
| PI WO 2002029070 | A2 | 20020411 | WO 2001-US31285 | 20011005 |
|------------------|----|----------|-----------------|----------|

|               |    |          |  |  |
|---------------|----|----------|--|--|
| WO 2002029070 | C2 | 20030220 |  |  |
|---------------|----|----------|--|--|

|               |    |          |  |  |
|---------------|----|----------|--|--|
| WO 2002029070 | A3 | 20030814 |  |  |
|---------------|----|----------|--|--|

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,  
 KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
 GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001096657 A5 20020415 AU 2001-96657 20011005  
 US 2002157133 A1 20021024 US 2001-972805 20011005

=> d 2 ab

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
 AB Paramutation is the directed, heritable alteration of the expression of one allele when heterozygous with another allele. Here, the isolation and characterization of a mutation affecting paramutation, mediator of paramutation1-1 (**mop1-1**), are described. Expts. demonstrate that the wild-type gene Mop1 is required for establishment and maintenance of the paramutant state. The **mop1-1** mutation affects paramutation at the multiple loci tested but has no effect on alleles that do not participate in paramutation. The mutation does not alter the amts. of actin and ubiquitin transcripts, which suggests that the mop1 gene does not encode a global repressor. Maize plants homozygous for **mop1-1** can have pleiotropic developmental defects, suggesting that **mop1-1** may affect more genes than just the known paramutant ones. The **mop1-1** mutation does not alter the extent of DNA methylation in rDNA and centromeric repeats. The observation that mop1 affects paramutation at multiple loci, despite major differences between these loci in their gene structure, correlations with DNA methylation, and stability of the paramutant state, suggests that a common mechanism underlies paramutation. A protein-based epigenetic model for paramutation is discussed.

=> d 2 so

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
 SO Plant Cell (2000), 12(11), 2101-2118  
 CODEN: PLCEEW; ISSN: 1040-4651

=> d 3 ab

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AB The chi square ( $\chi^2$ ) values, which represent the degree of the agreement of the calculated cross sections with their exptl. values, are calculated for 3 kinds of optical potential, which are resp. the phenomenol. optimal optical potential (OOP) for a specific element, the global phenomenol. optical potential given by Becchetti and Grenlees (BGP) for a large amount of target nuclei and the microscopic optical potential based on Skyrme force (MOP). Some 14 natural elements (each containing 1-4 isotopes) are calculated with 12-20 n incident energies, which are in the 0.1-24 MeV energy range for each element, resp. The calculated average total  $\chi^2$  values are .hivin. $\chi$ OOP2 = 0.496, .hivin. $\chi$  MOP2 = 1.150, and .hivin. $\chi$ BGP2 = 1.355, from which one obtains the ratio of average deviation of calculated nuclear data from their exptl. values .hivin. $\Delta$ MOP/.hivin. $\Delta$ OOP = 1.52 and .hivin. $\Delta$ BGP/.hivin. $\Delta$ OOP = 1.65. The microscopic optical potential based on Skyrme force, which has AN anal. formalism without any free parameters, is very useful in nuclear data calcns. and evaluations.

=> s pta-3956 or pta-4030 or pta-3965 or pta-3828  
 L3 0 PTA-3956 OR PTA-4030 OR PTA-3965 OR PTA-3828  
 => s pta3956 or pta4030 or pta3965 or pta3828

L4 0 PTA3956 OR PTA4030 OR PTA3965 OR PTA3828

=> s paramuta?

L5 230 PARAMUTA?

=> s 15 and methyl?

L6 63 L5 AND METHYL?

=>

=> s 16 and plant?

L7 58 L6 AND PLANT?

=> dup rem 17

PROCESSING COMPLETED FOR L7

L8 33 DUP REM L7 (25 DUPLICATES REMOVED)

=> d 1-10 ti

L8 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

TI Genomic imprinting in **plants**

L8 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

TI Trans allele **methylation** and **paramutation**-like effects  
in mice

L8 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

TI Genes affecting transgene silencing in maize and the development of  
**plant** lines with low levels of transgene silencing for breeding

L8 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

TI A mutation that prevents **paramutation** in maize also reverses  
Mutator transposon **methylation** and silencing

L8 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4

TI Differential chromatin structure within a tandem array 100 kb upstream of  
the maize b1 locus is associated with **paramutation**

L8 ANSWER 6 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI **Plant** epigenetics.

L8 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5

TI Structural features and **methylation** patterns associated with  
**paramutation** at the r1 locus of Zea mays

L8 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 6

TI RNA-directed transcriptional gene silencing in **plants** can be  
inherited independently of the RNA trigger and requires Met1 for  
maintenance

L8 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7

TI Robertson's Mutator transposons in A. thaliana are regulated by the  
chromatin-remodeling gene Decrease in DNA **Methylation** (DDM1)

L8 ANSWER 10 OF 33 AGRICOLA Compiled and distributed by the National  
Agricultural Library of the Department of Agriculture of the United States  
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(2005) on STN DUPLICATE 8

TI Transgene-induced silencing identifies sequences involved in the  
establishment of **paramutation** of the maize p1 gene.

=> d 3 ab

L8 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

AB Transgenic silencing is a little understood process by which genes  
introduced into **plants** are turned off or silenced. Genetic  
screens were designed to identify corn mutants with reduced gene silencing

activity. Such mutant corn lines include Mop1-1; Mop1-2EMS; Mop2-1, mop3-1; CC2343, rmr1-1; rmr1-2; rmr2-1; rmr6-1; rmr7-1; rmr7-2; rmr8-1; rmr9-1; Mop1-4; Mop1-5; and rmr11-1 and seeds derived therefrom, the **plants** are useful for corn breeding programs to produce inbred and hybrid seed with reduced gene silencing activity.

=> d 3 pi

|    |   |      |          |                 |          |
|----|---|------|----------|-----------------|----------|
| L8 | ANSWER 3 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN   |      |          |                 |          |
|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|    | -----   | ---- | -----    | -----           | -----    |
| PI | WO 2002029070   | A2   | 20020411 | WO 2001-US31285 | 20011005 |
|    | WO 2002029070   | C2   | 20030220 |                 |          |
|    | WO 2002029070   | A3   | 20030814 |                 |          |
|    | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW |      |          |                 |          |
|    | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
|    | AU 2001096657   | A5   | 20020415 | AU 2001-96657   | 20011005 |
|    | US 2002157133   | A1   | 20021024 | US 2001-972805  | 20011005 |

=> d 4 ab

L8 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3  
 AB Both **paramutation** and Mutator (Mu) transposon inactivation involve heritable changes in gene expression without concomitant changes in DNA sequence. The mechanisms by which these shifts in gene activity are achieved are unknown. Here we present evidence that these two phenomena are linked mechanistically. We show that mutation of a gene, modifier of **paramutation** 1 (mop1), which prevents **paramutation** at three different loci in maize, can reverse **methylation** of Mutator elements reliably. In mop1 mutant backgrounds, **methylation** of nonautonomous Mu elements can be reversed even in the absence of the regulatory MuDR element. Previously silenced MuDR elements are reactivated sporadically after multiple generations of exposure to mop1 mutations. MuDR **methylation** is separable from MuDR silencing, because removal of **methylation** does not cause immediate reactivation. The mop1 mutation does not alter the **methylation** of certain other transposable elements including those just upstream of a **paramutable** b1 gene. Our results suggest that the mop1 gene acts on a subset of epigenetically regulated sequences in the maize genome and **paramutation** and Mu element **methylation** require a common factor, which we hypothesize influences chromatin structure.

=> d 4 so

L8 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3  
 SO Proceedings of the National Academy of Sciences of the United States of America (2002), 99(9), 6130-6135  
 CODEN: PNASA6; ISSN: 0027-8424

=> d 5 ab

L8 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4  
 AB Recombination mapping defined a 6-kb region, 100 kb upstream of the transcription start site, that is required for B-I enhancer activity and **paramutation**-a stable, heritable change in transcription caused by

allele interactions in maize (*Zea mays*). In this region, B-I and B' (the only b1 alleles that participate in **paramutation**) have seven tandem repeats of an 853-bp sequence otherwise unique in the genome; other alleles have one. Examination of recombinant alleles with different nos. of tandem repeats indicates that the repeats are required for both **paramutation** and enhancer function. The 6-kb region is identical in B-I and B', showing that epigenetic mechanisms mediate the stable silencing associated with **paramutation**. This is the first endogenous gene for which sequences required for **paramutation** have been defined and examined for **methylation** and chromatin structure. The tandem repeat sequences are more **methyated** in B-I (high expressing) relative to B' (low expressing), opposite of the typical correlation. Furthermore, the change in repeat **methylation** follows establishment of the B' epigenetic state. B-I has a more open chromatin structure in the repeats relative to B'. The nuclease hypersensitivity differences developmentally precede transcription, suggesting that the repeat chromatin structure could be the heritable imprint distinguishing the two transcription states.

=> d 5 so

L8 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4  
 SO Genes & Development (2002), 16(15), 1906-1918  
 CODEN: GEDEEP; ISSN: 0890-9369

=> d 6 ab

L8 ANSWER 6 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

=> d 6 so

L8 ANSWER 6 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 SO Current Biology, (June 25, 2002) Vol. 12, No. 12, pp. R412-R414. print.  
 CODEN: CUBLE2. ISSN: 0960-9822.

=> d 9 ab

L8 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7  
 AB Robertson's Mutator transposable elements in maize undergo cycles of activity and then inactivity that correlate with changes in cytosine **methylation**. Mutator-like elements are present in the Arabidopsis genome but are heavily **methyated** and inactive. These elements become demethylated and active in the chromatin-remodeling mutant *ddm1* (Decrease in DNA **Methylation**), which leads to loss of heterochromatic DNA **methylation**. Thus, DNA transposons in **plants** appear to be regulated by chromatin remodeling. In inbred *ddm1* strains, transposed elements may account, in part, for mutant phenotypes unlinked to *ddm1*. Gene silencing and **paramutation** are also regulated by DDM1, providing support for the proposition that epigenetic silencing is related to transposon regulation.

=> d 9 so

L8 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7  
 SO Genes & Development (2001), 15(5), 591-602  
 CODEN: GEDEEP; ISSN: 0890-9369

=> d 7 ab

L8 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5  
 AB In **paramutation**, two alleles of a gene interact and, during the interaction, one of them becomes epigenetically silenced. The various

**paramutation** systems that have been studied to date exhibit intriguing differences in the phys. complexity of the loci involved. B and P1 alleles that participate in **paramutation** are simple, single genes, while the R haplotypes that participate in **paramutation** contain multiple gene copies and often include rearrangements. The number and arrangement of the sequences in particular complex R haplotypes have been correlated with **paramutation** behavior. Here, the phys. structures of 28 addnl. haplotypes of R were examined. A specific set of phys. features is associated with **paramutability** (the ability to be silenced). However, no phys. features were strongly correlated with **paramutagenicity** (the ability to cause silencing) or neutrality (the inability to participate in **paramutation**). Instead, **paramutagenic** haplotypes were distinguished by high levels of cytosine **methylation** over certain regions of the genes while neutral haplotypes were distinguished by lack of C-**methylation** over these regions. These findings suggest that **paramutability** of R1 is determined by the genetic structure of particular haplotypes, while **paramutagenicity** is determined by the epigenetic state.

=> d 7 so

L8 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5  
 SO Genetics (2001), 159(3), 1201-1215  
 CODEN: GENTAE; ISSN: 0016-6731

=> d 10 ab

L8 ANSWER 10 OF 33 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 8  
 AB A transgene carrying a distal enhancer element of the maize P1-rr promoter caused silencing of an endogenous P1-rr allele in the progeny of transgenic maize **plants**. Expression of both the transgene and the endogenous P1-rr allele was reduced in the affected **plants**. The silenced phenotype was observed in the progeny of seven of eight crosses involving three independent transgenic events tested (average frequency of 19%). This phenotype was associated with an induced epigenetic state of the P1-rr allele, termed P1-rr', which is characterized by increased **methylation** of the P1-rr flanking regions and decreased levels of P1-rr transcript. The P1-rr' epiallele is highly heritable in the absence of the inducing P1.2b::GUS transgene, and it can impose an equivalent state on a naive P1-rr allele in subsequent crosses (**paramutation**). In contrast, parallel experiments with two other P::GUS transgenes that contained the same basal P1-rr promoter fragment but different upstream sequences revealed no detectable silencing effect. Thus, transgenes carrying a specific enhancer fragment of the P1-rr gene promoter can trigger a **paramutant** state (P1-rr') of the endogenous P1-rr gene that is maintained in the absence of the inducing transgene. We discuss the potential role of the P1-rr distal enhancer element in the establishment and propagation of a **paramutation** system in maize.

=> d 10 so

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 SO The Plant cell, Feb 2001. Vol. 13, No. 2. p. 319-335  
 Publisher: [Rockville, MD : American Society of Plant Physiologists, c1989-  
 CODEN: PLCEEW; ISSN: 1040-4651



=> d 11- 20 ti

YOU HAVE REQUESTED DATA FROM 24 ANSWERS - CONTINUE? Y/(N):n

=> d 11-20 ti

L8 ANSWER 11 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN

TI Epigenetic control of gene expression in **plants**.

L8 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 9

TI Mediator of **paramutation1** is required for establishment and  
maintenance of **paramutation** at multiple maize loci

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(2005) on STN DUPLICATE 10

TI **Paramutation** alters regulatory control of the maize pl locus.

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of America. It contains copyrighted materials. All rights reserved.  
(2005) on STN DUPLICATE 11

TI Genomic imprinting in **plants**: observations and evolutionary  
implications.

L8 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

TI Homology-dependent gene silencing in transgenic **plants**: Links to  
cellular defense responses and genome evolution

L8 ANSWER 16 OF 33 AGRICOLA Compiled and distributed by the National  
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of America. It contains copyrighted materials. All rights reserved.  
(2005) on STN DUPLICATE 12

TI **Paramutation** in maize.

L8 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 13

TI Epigenetics: regulation through repression

L8 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

TI Internuclear gene silencing in *Phytophthora infestans*

L8 ANSWER 19 OF 33 AGRICOLA Compiled and distributed by the National  
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of America. It contains copyrighted materials. All rights reserved.  
(2005) on STN DUPLICATE 14

TI Molecular and cytogenetic characterization of a transgene locus that  
induces silencing and **methylation** of homologous promoters in  
trans.

L8 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 15

TI **Paramutation** of the r1 locus of maize is associated with  
increased cytosine **methylation**

=>

=> d 12 ab

L8 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 9

AB **Paramutation** is the directed, heritable alteration of the  
expression of one allele when heterozygous with another allele. Here, the  
isolation and characterization of a mutation affecting  
**paramutation**, mediator of **paramutation1-1** (mop1-1), are  
described. Expts. demonstrate that the wild-type gene Mop1 is required  
for establishment and maintenance of the **paramutant** state. The  
mop1-1 mutation affects **paramutation** at the multiple loci tested  
but has no effect on alleles that do not participate in

**paramutation**. The mutation does not alter the amts. of actin and ubiquitin transcripts, which suggests that the mopl1 gene does not encode a global repressor. Maize **plants** homozygous for mopl1-1 can have pleiotropic developmental defects, suggesting that mopl1-1 may affect more genes than just the known **paramutant** ones. The mopl1-1 mutation does not alter the extent of DNA **methylation** in rDNA and centromeric repeats. The observation that mopl1 affects **paramutation** at multiple loci, despite major differences between these loci in their gene structure, correlations with DNA **methylation**, and stability of the **paramutant** state, suggests that a common mechanism underlies **paramutation**. A protein-based epigenetic model for **paramutation** is discussed.

=> d 12 so

L8 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 9  
SO Plant Cell (2000), 12(11), 2101-2118  
CODEN: PLCEEW; ISSN: 1040-4651

=> d 19 ab

L8 ANSWER 19 OF 33 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 14  
AB One type of homology-dependent gene silencing in transgenic **plants** involves a silencing locus that is able to transcriptionally inactivate and **methyate** an unlinked target locus with which it shares sequence identity in promoter regions. In a manner resembling **paramutation** of endogenous genes, the target locus reactivates and loses **methylation** progressively over several generations after segregating away from the silencing locus, which autonomously acquires stable **methylation**. To investigate the origins of trans-silencing ability and susceptibility, we have analyzed the structures, flanking DNA sequences and chromosomal locations of a nopaline synthase promoter silencing locus, H2, and a sensitive target locus, K81. A partially resistant target locus, K alpha, has been characterized molecularly. The complex and scrambled H2 locus comprises six copies of the nopaline synthase promoter, two of which are collinear with prokaryotic non-T-DNA sequences, and is integrated close to a region of intercalary heterochromatin. These features probably contribute collectively to the silencing ability because H2 subclones reintroduced into random locations in the K81 genome did not frequently induce silencing. Both the K81 and K alpha loci have simple structures, although the former contains non-T-DNA prokaryotic sequences that are also present at H2, and they are flanked by low copy **plant** DNA. H2 and K81 might interact effectively because they are present on morphologically similar chromosomes from the T subgenome of allotetraploid tobacco.

=> d 20 ab

L8 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 15  
AB In **paramutation**, two alleles of a gene interact so that one of the alleles is epigenetically silenced. The silenced state is then genetically transmissible for many generations. The large (220 kbp) multigenic complex R-r is **paramutable**: its level of expression is changed during **paramutation**. R-r was found to exhibit increases in its level of cytosine **methylation** (C-**methylation**) following **paramutation**. These C-**methylation** changes are localized to the 5' portions of the two genes in the complex that are most sensitive to **paramutation**. These **methylation** changes flank a small region called  $\sigma$  that is thought to have been derived from a transposon named doppia. A mutant derivative of R-r that has a deletion of the  $\sigma$  region fails to become **methyated** under conditions in which R-r is heavily

**methyalted**. This suggests that the presence of  $\sigma$  sequences at the locus is required for the **methylation** changes that are observed following **paramutation**.

=> d 20 so

L8 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 15  
S0 Genetics (1998), 148(4), 1973-1981  
CODEN: GENTAE; ISSN: 0016-6731

=> d 21-30 ti

L8 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 16  
TI Epigenetic control of transcription. Epigenetic silencing of **plant** transgenes as a consequence of diverse cellular defense responses

L8 ANSWER 22 OF 33 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI **Plant** breeding progress and genetic diversity from de novo variation and elevated epistasis.

L8 ANSWER 23 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI **Paramutation** and related allelic interactions.

L8 ANSWER 24 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Homology-dependent gene silencing in **plants**.

L8 ANSWER 25 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Epigenetic silencing and activation of a maize r gene.

L8 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 17

TI Interchromosomal transfer of epigenetic states in *Ascomobolus*: transfer of DNA **methylation** is mechanistically related to homologous recombination

L8 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

TI Epigenetic silencing and activation of a maize r gene

L8 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

TI The role of DNA **methylation** in transgene silencing in **plants**

L8 ANSWER 29 OF 33 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI Gene silencing in higher **plants** and related phenomena in other eukaryotes.

L8 ANSWER 30 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Susceptibility of transgene loci to homology-dependent gene silencing.

=> d 28 so

L8 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN

S0 Mechanisms and Applications of Gene Silencing, [Easter School in Agricultural Science], 57th, Sutton Bonington, UK, Mar., 1995 (1996), Meeting Date 1995, 43-48. Editor(s): Grierson, Donald; Lycett, Grantley W.; Tucker, Gregory A. Publisher: Nottingham University Press, Nottingham,

=> d 28 ab

- L8 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2005 ACS on STN  
AB A review with 26 refs. on DNA **methylation** and gene activity, hypermethylation of multiple copies of genes in **plants**, position effects on transgenes in **plants**, transgene-specific **methylation**, and **paramutation**.

=> d 30 ab

- L8 ANSWER 30 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
AB Previous work has shown that two unlinked, partially homologous transgene loci can interact in **plant** nuclei, leading to reversible **methylation** and inactivation of one transgene locus in the presence of the second. To study whether the chromosomal location of a transgene influences its susceptibility to trans-inactivation, we retransformed four transgenic lines, which contained the same construct (H) integrated in different chromosomal locations, with a second, partially homologous construct (K). At least 50 double transformants (DTs) were regenerated from each single transformant (ST) and screened for inactivation of markers (chloramphenicol acetyltransferase (CAT,); hygromycin resistance (HYG)) at the resident H locus. For two STs, H locus markers were inactivated in less than 1% of the DTs, suggesting that, at these integration sites, H was relatively resistant to trans-inactivation. In contrast, the other two STs appeared to be more sensitive to trans-inactivation: 4-10% of the DTs were CAT- and/or Hyg. Inactivation of H locus markers could be attributed to two distinct phenomena: 1. Regeneration from cells containing different epigenetic states of H, in which either both, one or none of the H alleles was active. This instability in the expression of the H locus, which was independent of K, was more pronounced in the homozygous state, and was associated with cellular mosaicism of expression and **methylation**. 2. The presence of an unlinked K locus could weaken the Hyg phenotype by transcriptional inactivation and increased **methylation** of the hph gene at the H locus. These results indicated that a susceptible transgene locus is inherently unstable and partially **methyated**, and that these characteristics are exacerbated when the locus is homozygous for the transgene and/or when an unlinked homologous transgene is present.

=>  
=> d 30 so

- L8 ANSWER 30 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
SO Molecular and General Genetics, (1994) Vol. 244, No. 3, pp. 230-241.  
CODEN: MGGEAE. ISSN: 0026-8925.

=> d 31-33 ti

- L8 ANSWER 31 OF 33 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN  
TI **Paramutation**, an allelic interaction, is associated with a stable and heritable reduction of transcription of the maize b regulatory gene.  
L8 ANSWER 32 OF 33 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States

of America. It contains copyrighted materials. All rights reserved.  
(2005) on STN DUPLICATE 19

TI Differences in DNA-methylation are associated with a  
paramutation phenomenon in transgenic petunia.

L8 ANSWER 33 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN

TI PARAMUTATION OF THE MAIZE R GENE.

=> d 33 ab

L8 ANSWER 33 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN

=> d 33 so

L8 ANSWER 33 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN

SO Journal of Cellular Biochemistry Supplement, (1991) No. 15 PART A, pp.  
142.

Meeting Info.: SYMPOSIUM ON THE GENETIC DISSECTION OF PLANT CELL PROCESSES  
HELD AT THE 20TH ANNUAL MEETING OF THE KEYSTONE SYMPOSIA ON MOLECULAR AND  
CELLULAR BIOLOGY, KEYSTONE, COLORADO, USA, JANUARY 10-17, 1991. J CELL  
BIOCHEM SUPPL.  
ISSN: 0733-1959.

=> d 32 ab

L8 ANSWER 32 OF 33 AGRICOLA Compiled and distributed by the National  
Agricultural Library of the Department of Agriculture of the United States  
of America. It contains copyrighted materials. All rights reserved.  
(2005) on STN DUPLICATE 19

=> d 32 so

L8 ANSWER 32 OF 33 AGRICOLA Compiled and distributed by the National  
Agricultural Library of the Department of Agriculture of the United States  
of America. It contains copyrighted materials. All rights reserved.  
(2005) on STN DUPLICATE 19

SO The plant journal, July 1993. Vol. 4, No. 1. p. 89-100  
Publisher: Oxford : Blackwell Scientific Publishers and BIOS Scientific  
Publishers.  
ISSN: 0960-7412

=> d 33 ab

L8 ANSWER 33 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN

=> d 33 so

L8 ANSWER 33 OF 33 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN

SO Journal of Cellular Biochemistry Supplement, (1991) No. 15 PART A, pp.  
142.

Meeting Info.: SYMPOSIUM ON THE GENETIC DISSECTION OF PLANT CELL PROCESSES  
HELD AT THE 20TH ANNUAL MEETING OF THE KEYSTONE SYMPOSIA ON MOLECULAR AND  
CELLULAR BIOLOGY, KEYSTONE, COLORADO, USA, JANUARY 10-17, 1991. J CELL  
BIOCHEM SUPPL.  
ISSN: 0733-1959.

```
=> s '((chandler v?) or (chandler, v?))/au
L9      242 ((CHANDLER V?) OR (CHANDLER, V?))/AU
```

```
=> s l9 and paramut?
L10     44 L9 AND PARAMUT?
```

```
=> dup rem l10
PROCESSING COMPLETED FOR L10
L11     23 DUP REM L10 (21 DUPLICATES REMOVED)
```

```
=> d 1-10 tui
'TUI' IS NOT A VALID FORMAT
```

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

```
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ti
```

```
L11 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
TI Chromatin conversations: mechanisms and implications of
paramutation
```

```
L11 ANSWER 2 OF 23 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Paramutation, an allele interaction that causes heritable
changes in transcription involves long distance interactions and chromatin
structural changes.
```

```
L11 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
TI Genes affecting transgene silencing in maize and the development of plant
lines with low levels of transgene silencing for breeding
```

```
L11 ANSWER 4 OF 23 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 2
TI A mutation that prevents paramutation in maize also reverses
Mutator transposon methylation and silencing.
```

```
L11 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
TI Differential chromatin structure within a tandem array 100 kb upstream of
the maize b1 locus is associated with paramutation
```

```
L11 ANSWER 6 OF 23 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 4
TI The regulatory regions required for B' paramutation and
expression are located far upstream of the maize b1 transcribed sequences.
```

```
L11 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
TI Long-distance cis and trans interactions mediate paramutation
```

```
L11 ANSWER 8 OF 23 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 5
TI Genetic factors required to maintain repression of a paramutagenic
maize p11 allele.
```

```
L11 ANSWER 9 OF 23 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Gene activation and gene silencing.
```

```
L11 ANSWER 10 OF 23 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI Epigenetic control of gene expression in plants.
```

```
=> s ((hollick j?) or (hollick, j?))/au
```

L12 40 ((HOLLYCK J?) OR (HOLLYCK, J?))/AU

=> dup rem l12

PROCESSING COMPLETED FOR L12

L13 22 DUP REM L12 (18 DUPLICATES REMOVED)

=> d 1-10 ti

L13 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

TI Pilot screening programme for small molecule activators of p53

L13 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

TI 2,6-Disubstituted pyran-4-one and thiopyran-4-one inhibitors of DNA-Dependent protein kinase (DNA-PK)

L13 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding

L13 ANSWER 4 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 2

TI Genetic factors required to maintain repression of a paramutagenic maize pl1 allele.

L13 ANSWER 5 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 3

TI mediator of paramutation1 Is required for establishment and maintenance of paramutation at multiple maize loci.

L13 ANSWER 6 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 4

TI Paramutation alters regulatory control of the maize pl locus.

L13 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

TI Combined solar collector and photovoltaic cells

L13 ANSWER 8 OF 22 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Repellency of Deer Away Big Game Repellent(R) to eastern cottontail rabbits.

L13 ANSWER 9 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 5

TI Epigenetic allelic states of a maize transcriptional regulatory locus exhibit overdominant gene action.

L13 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN

TI Solar cogeneration panels

=> s l13 and paramut?

L14 9 L13 AND PARAMUT?

=> d 1-9 ti

L14 ANSWER 1 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI Genetic factors required to maintain repression of a paramutagenic maize pl1 allele.

L14 ANSWER 2 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI mediator of **paramutation1** Is required for establishment and maintenance of **paramutation** at multiple maize loci.

L14 ANSWER 3 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI **Paramutation** alters regulatory control of the maize pl locus.

L14 ANSWER 4 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI **Paramutation** and related allelic interactions.

L14 ANSWER 5 OF 9 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

TI Allelic interactions heritably alter the activity of a metastable maize pl allele.

L14 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding

L14 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI b and pl **paramutation** in maize: heritable transcription states programmed during development

L14 ANSWER 8 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI B And pl **paramutation** in maize: Heritable transcription states programmed during development.

L14 ANSWER 9 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI **Paramutation**: An allelic interaction that causes heritable changes in transcription.

=> s ((dorweiler j?) or (dorweiler j?))/au

L15 28 ((DORWEILER J?) OR (DORWEILER J?))/AU

=> s l15 and paramut?

L16 19 L15 AND PARAMUT? ,

=> dup rem l16

PROCESSING COMPLETED FOR L16

L17 8 DUP REM L16 (11 DUPLICATES REMOVED)

=> d 1-8 ti

L17 ANSWER 1 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Differential gene expression in mediator of **paramutation** (mop) mutants of maize.

L17 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding

L17 ANSWER 3 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN

DUPLICATE 1



TI A mutation that prevents **paramutation** in maize also reverses Mutator transposon methylation and silencing.

L17 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

TI Differential chromatin structure within a tandem array 100 kb upstream of the maize b1 locus is associated with **paramutation**

L17 ANSWER 5 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 3

TI The regulatory regions required for B' **paramutation** and expression are located far upstream of the maize b1 transcribed sequences.

L17 ANSWER 6 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 4

TI mediator of **paramutation**1 Is required for establishment and maintenance of **paramutation** at multiple maize loci.

L17 ANSWER 7 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 5

TI **Paramutation** in maize.

L17 ANSWER 8 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 6

TI **Paramutation** and related allelic interactions.

=> s ((lisch d?) or (lisch, d?))/au

L18 51 ((LISCH D?) OR (LISCH, D?))/AU

=> s l18 and paramut?

L19 5 L18 AND PARAMUT?

=> dup rem l19

PROCESSING COMPLETED FOR L19

L20 3 DUP REM L19 (2 DUPLICATES REMOVED)

=> d 1-3 ti

L20 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding

L20 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

TI A mutation that prevents **paramutation** in maize also reverses Mutator transposon methylation and silencing

L20 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

TI Mutator transposons

=> d 1-3 so

L20 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

SO PCT Int. Appl., 173 pp.  
CODEN: PIXXD2

L20 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

SO Proceedings of the National Academy of Sciences of the United States of America (2002), 99(9), 6130-6135  
CODEN: PNASA6; ISSN: 0027-8424

L20 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2  
S0 Trends in Plant Science (2002), 7(11), 498-504  
CODEN: TPSCF9; ISSN: 1360-1385

=> s ((kubo k?) or (kubo, k?))/au  
L21 4187 ((KUBO K?) OR (KUBO, K?))/AU

=> s l21 and paramut?  
L22 12 L21 AND PARAMUT?

=> dup rem l22  
PROCESSING COMPLETED FOR L22  
L23 8 DUP REM L22 (4 DUPLICATES REMOVED)

=> d 1-8 ti

L23 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding

L23 ANSWER 2 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 1

TI mediator of **paramutation**1 Is required for establishment and maintenance of **paramutation** at multiple maize loci.

L23 ANSWER 3 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI B And pl **paramutation** in maize: Heritable transcription states programmed during development.

L23 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN  
TI b and pl **paramutation** in maize: heritable transcription states programmed during development

L23 ANSWER 5 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 2

TI Sequences required for **paramutation** of the maize b gene map to a region containing the promoter and upstream sequences.

L23 ANSWER 6 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI **Paramutation**: An allelic interaction that causes heritable changes in transcription.

L23 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI **Paramutation**: An allelic interaction that causes heritable changes in transcription.

L23 ANSWER 8 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI **Paramutation** in maize: Allelic interactions associated with heritable changes in transcription.

=> s ((carey c?) or (carey, c?))/au  
L24 458 ((CAREY C?) OR (CAREY, C?))/AU

=> s l21 and paramut?  
L25 12 L21 AND PARAMUT?

=> dup rem l25  
PROCESSING COMPLETED FOR L25  
L26 8 DUP REM L25 (4 DUPLICATES REMOVED)

=> d 1-8 ti

- L26 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI Genes affecting transgene silencing in maize and the development of plant lines with low levels of transgene silencing for breeding
- L26 ANSWER 2 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 1  
 TI mediator of **paramutation1** Is required for establishment and maintenance of **paramutation** at multiple maize loci.
- L26 ANSWER 3 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI B And pl **paramutation** in maize: Heritable transcription states programmed during development.
- L26 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN  
 TI b and pl **paramutation** in maize: heritable transcription states programmed during development
- L26 ANSWER 5 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 2  
 TI Sequences required for **paramutation** of the maize b gene map to a region containing the promoter and upstream sequences.
- L26 ANSWER 6 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI **Paramutation**: An allelic interaction that causes heritable changes in transcription.
- L26 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI **Paramutation**: An allelic interaction that causes heritable changes in transcription.
- L26 ANSWER 8 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI **Paramutation** in maize: Allelic interactions associated with heritable changes in transcription.

=> d 4 so

- L26 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN  
 SO Cold Spring Harbor Monograph Series (1996), 32(Epigenetic Mechanisms of Gene Regulation), 289-304  
 CODEN: CHMSDK; ISSN: 0270-1847

=> d 5 so

- L26 ANSWER 5 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 2  
 SO Genetics, Aug 1995. Vol. 140, No. 4. p. 1389-1406  
 Publisher: Bethesda, Md. : Genetics Society of America.  
 CODEN: GENTAE; ISSN: 0016-6731

=> d 6 so

- L26 ANSWER 6 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 SO Journal of Cellular Biochemistry Supplement, (1995) Vol. 0, No. 21B, pp. 157.  
 Meeting Info.: Keystone Symposium on Epigenetic Regulation of Transcription. Hilton Head Island, South Carolina, USA. April 4-10, 1995.  
 ISSN: 0733-1959.

=> d 7 ab

L26 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

=> d 7 so

L26 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

SO Plant Physiology (Rockville), (1995) Vol. 108, No. 2 SUPPL., pp. 14.

Meeting Info.: Annual Meeting of the American Society of Plant  
Physiologists. Charlotte, North Carolina, USA. July 29-August 2, 1995.

CODEN: PLPHAY. ISSN: 0032-0889.

=> d 9 so

8 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE

The answer numbers requested are not in the answer set.

ENTER ANSWER NUMBER OR RANGE (1):8

L26 ANSWER 8 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

SO Journal of Cellular Biochemistry Supplement, (1994) Vol. 0, No. 18B, pp.  
12.

Meeting Info.: Keystone Symposium on Transposition and Site-Specific  
Recombination: Mechanism and Biology. Park City, Utah, USA. January 21-28,  
1994.

ISSN: 0733-1959.